GRANARY CORRIDOR

Community Workshop #2

Minneapolis
City of Lakes

Kimley-Horn and Associates, Inc.

November 29, 2011

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Workshop Objectives

- Provide Project Status Update
  - Alternatives
  - Evaluation Criteria
- Gather Input on Alternatives Evaluation

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Workshop Agenda

8:30-9:15	Presentation
9:15-10:00	Small Groups - Discussion
10:00-10:30	Small Group Reports
	Next Steps

Presentation Outline

- Project Overview
- Project Status
  - Alternatives
  - Evaluation Criteria
- Evaluation Process
  - Evaluation Methodology
  - Preliminary Results

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Project Overview

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Who is Involved?

- City of Minneapolis*
- Hennepin County*
- University of Minnesota*
- University District Alliance*
- Minneapolis Park and Recreation Board*
- Metropolitan Council/Central Corridor Project Office
- City of Saint Paul
- Marcy Holmes Neighborhood Association*
- Prospect Park East River Road Improvement Association
- Nicollet Island East Bank Neighborhood Association
- Minneapolis Riverfront Partnership
- Southeast Business Association
- Dinkytown Business Association
- Stadium Village Improvement Association

* Project Management Team

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What is the Project Status?

1

Develop Criteria

2

Develop Analysis Measures and Methods

3

Analyze Costs/ Benefits

- Count, measure, document, etc.
- Translate into scores (1-5)
- Total scores by category and sub-category

4

Interpret Results

- Key differentiators
- Trends
- Weighting
- Sensitivity analysis

5

Recommend

- Short-term
- Long-term

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Project Status

- Progress Since July Workshop
  - Documented and reviewed feedback from Workshop #1
  - Refined alternatives
  - Refined evaluation criteria
  - Defined evaluation process
  - Conducted preliminary evaluation

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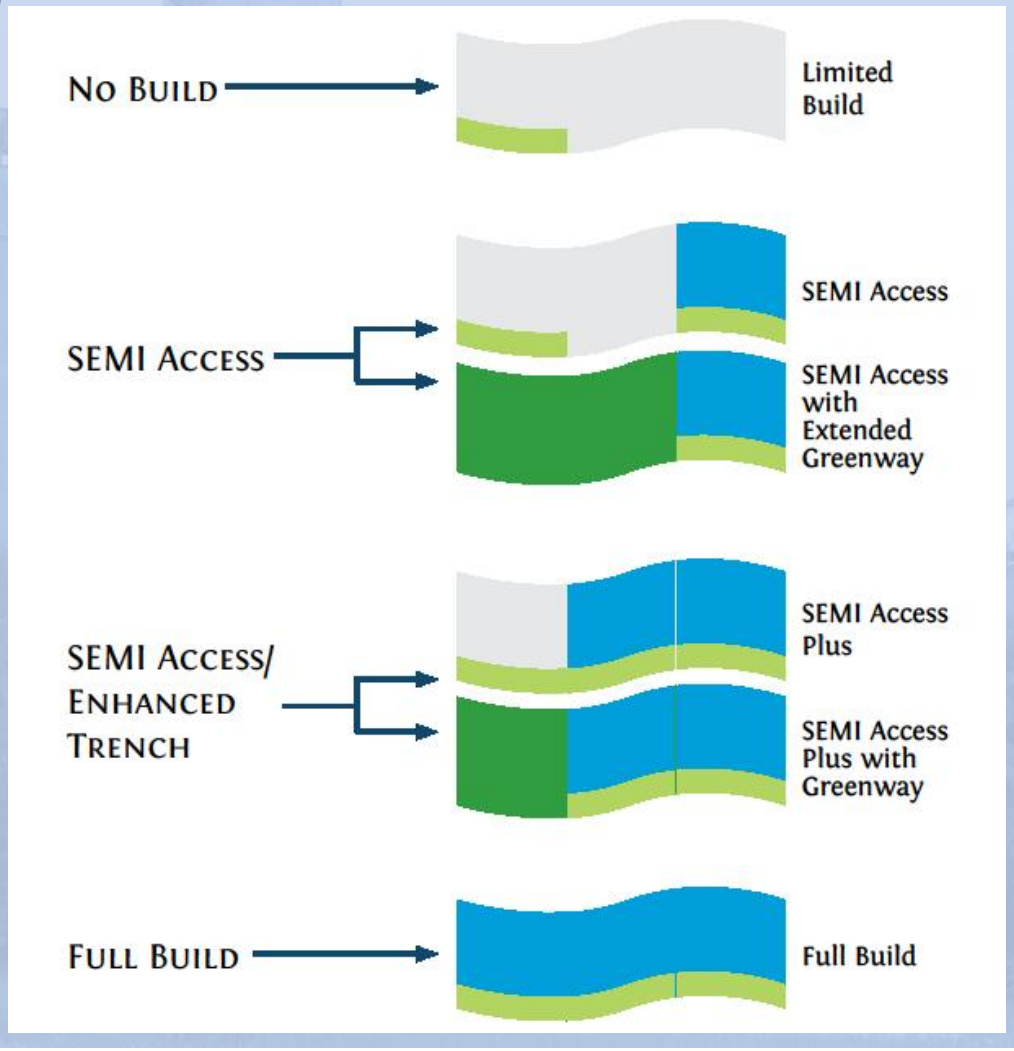
Project Status - Alternatives



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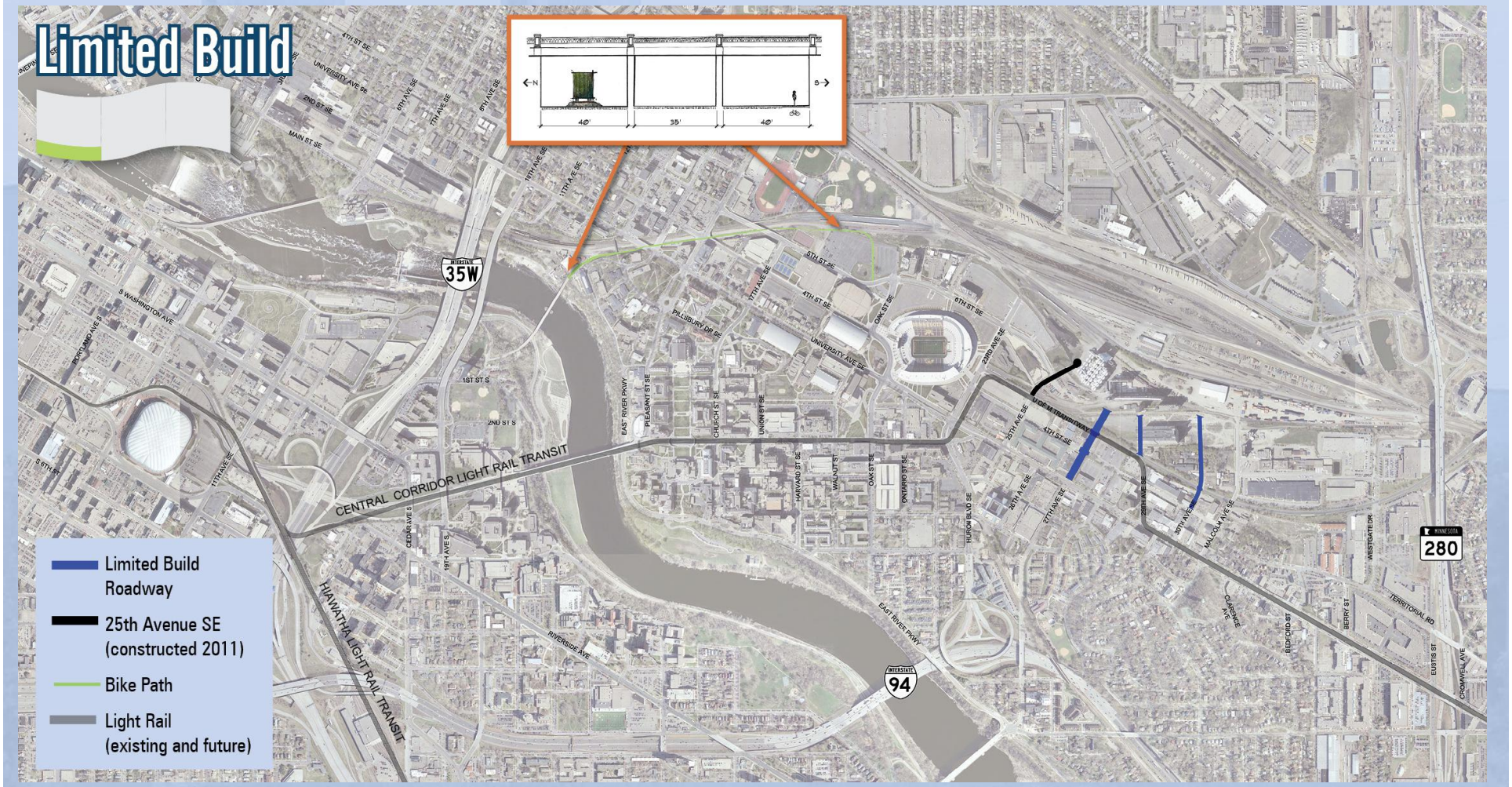
Limited Build Alternative



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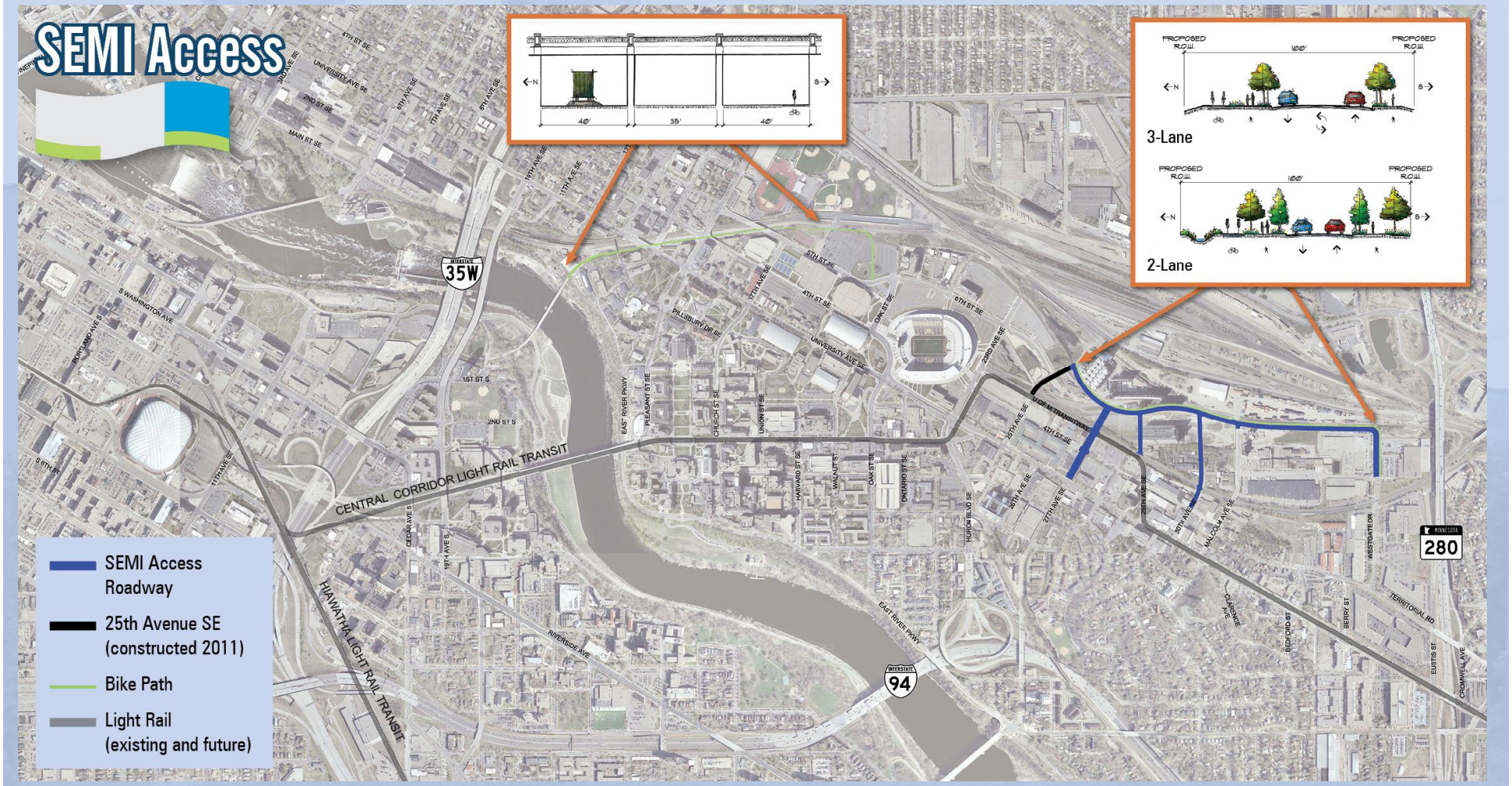
SEMI Access Alternative



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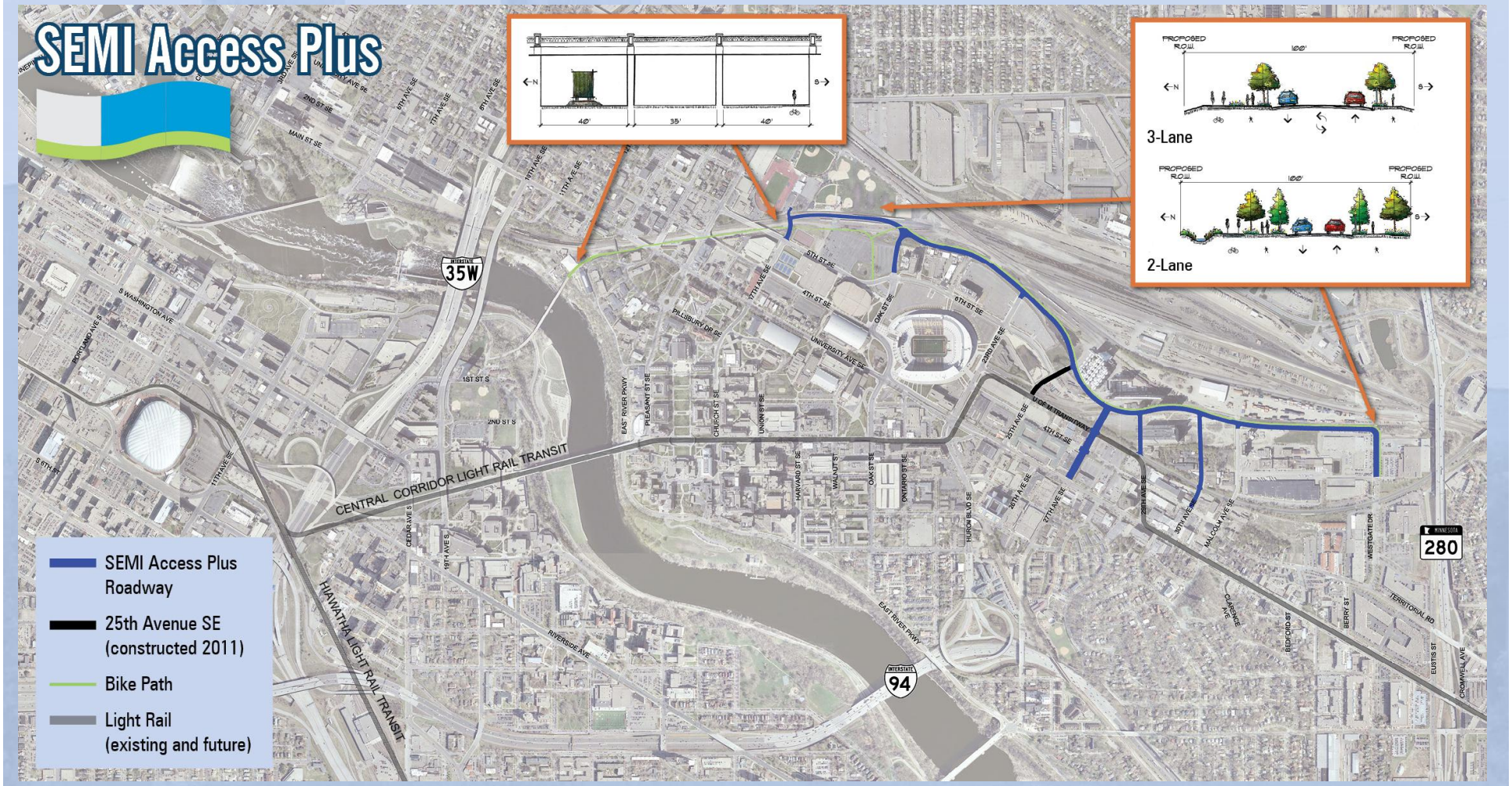
SEMI Access Plus Alternative



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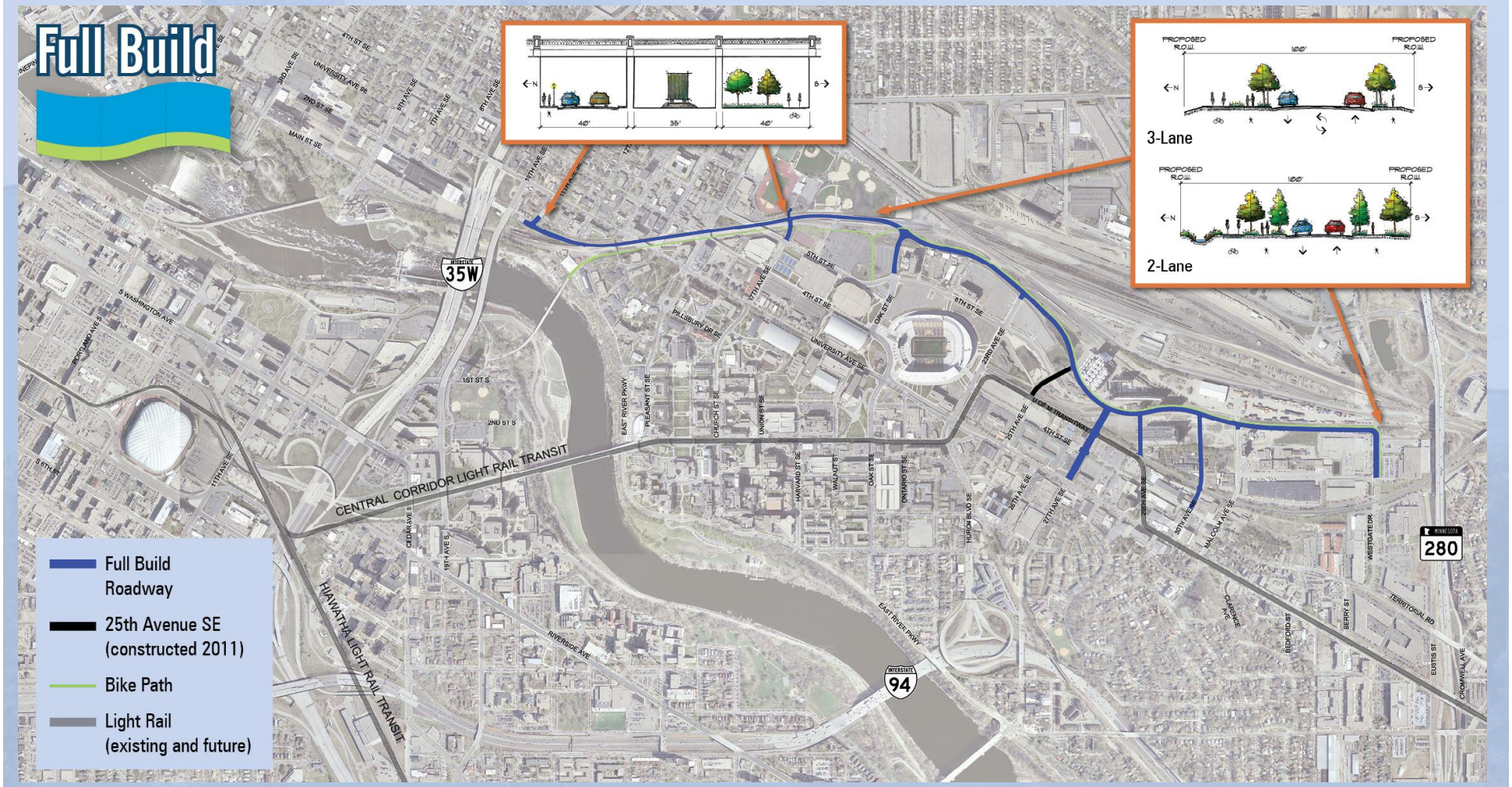
Full Build Alternative



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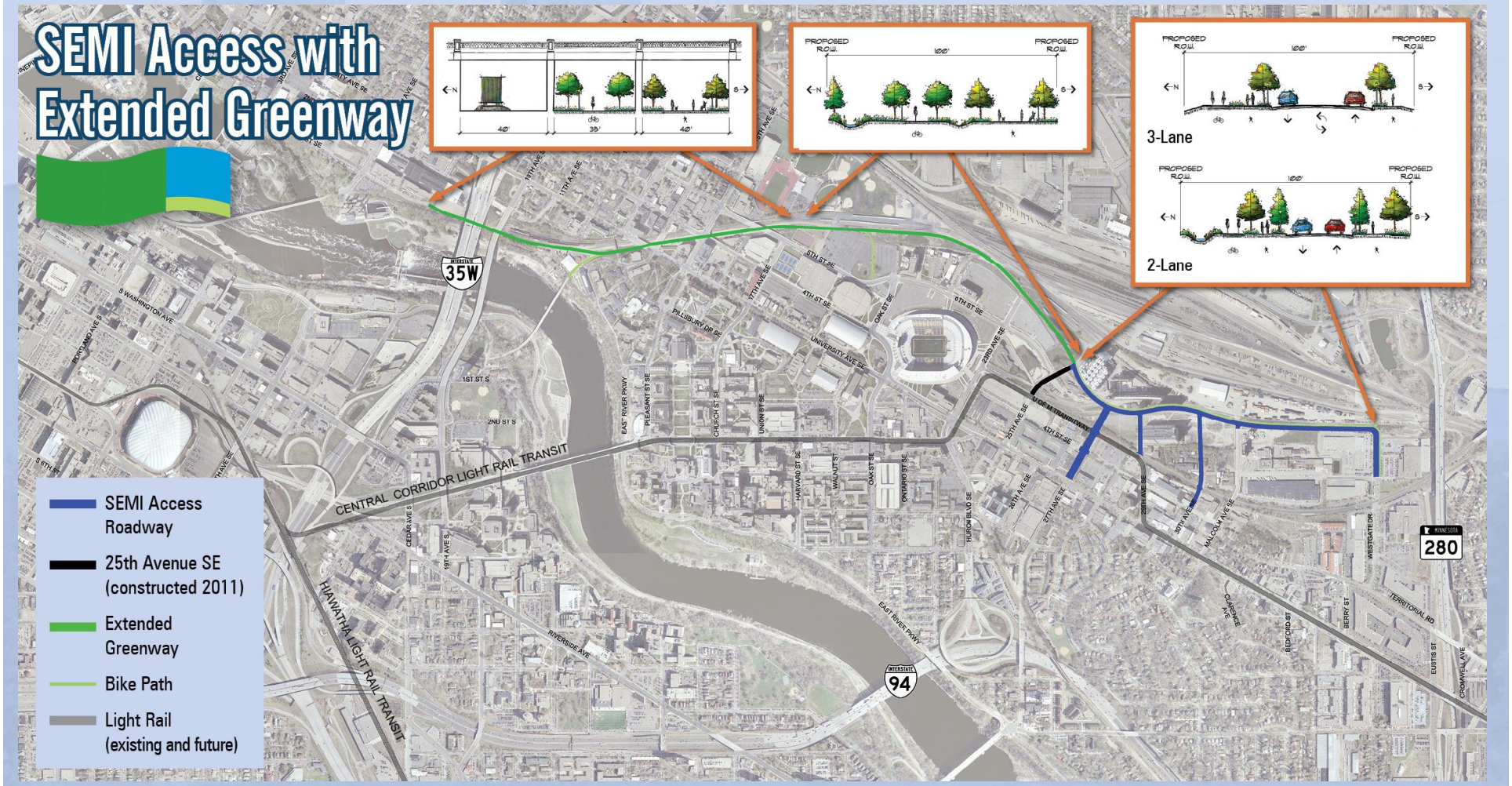
SEMI Access with Extended Greenway Alternative



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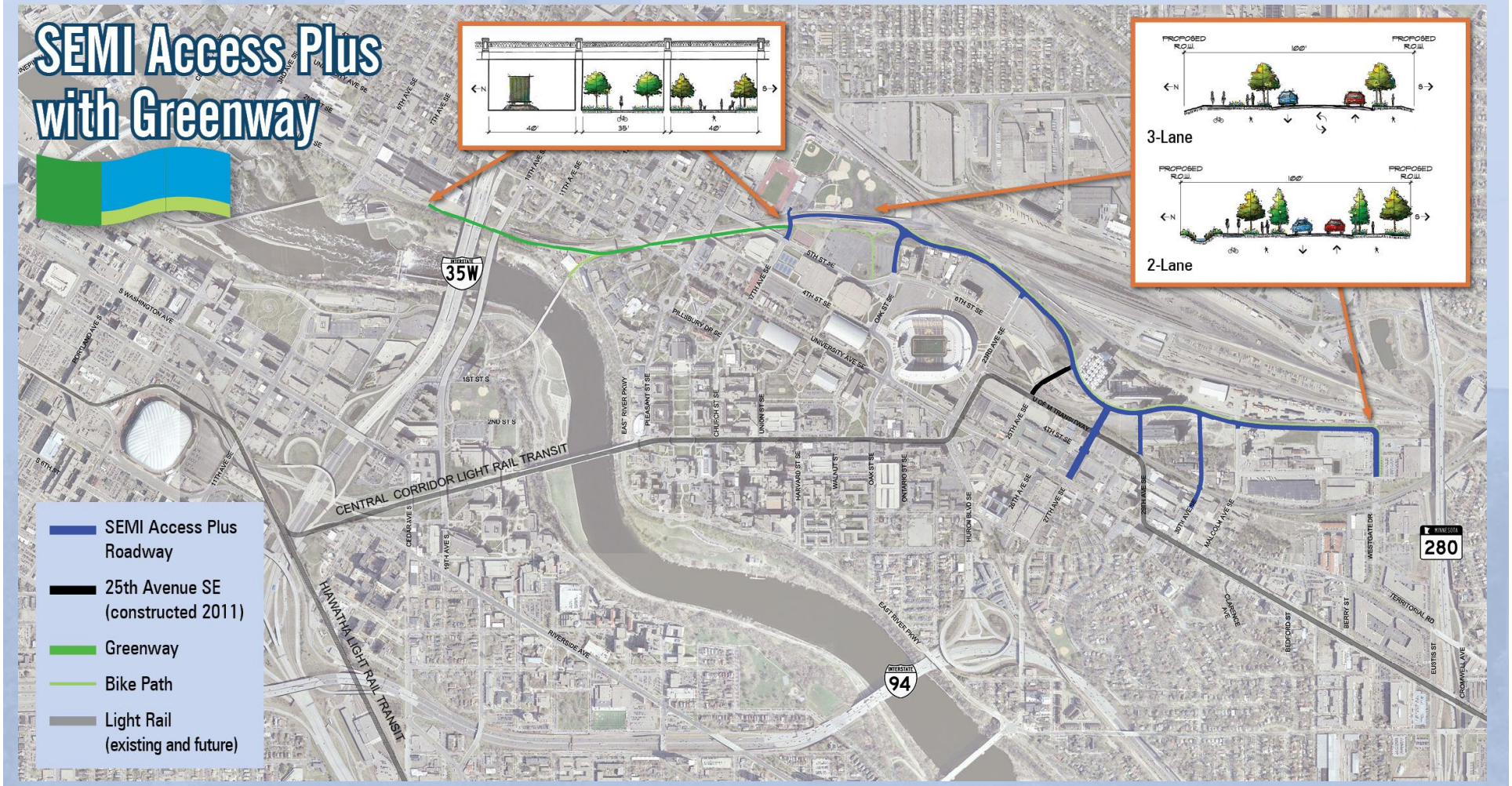
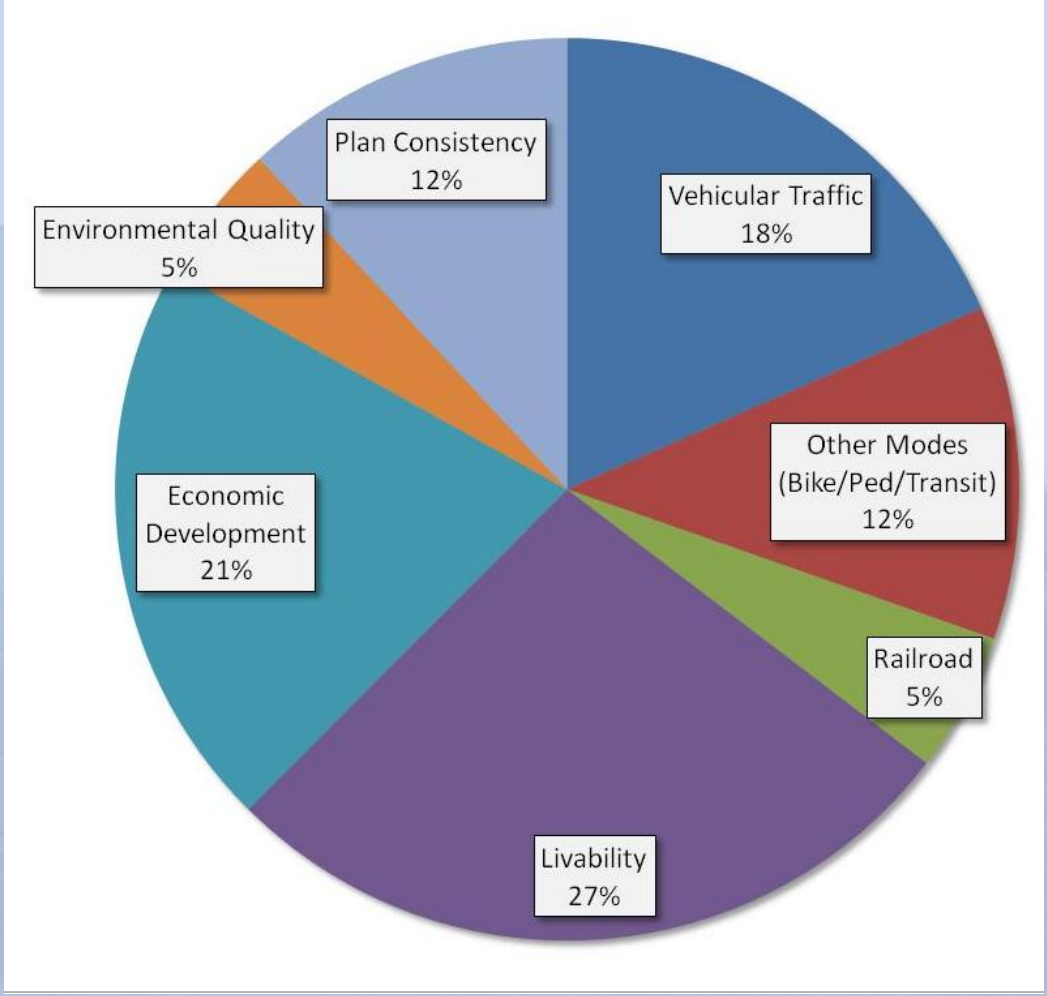
SEMI Access Plus with Greenway Alternative



Project Status - Evaluation Criteria

- Criteria (7 categories)
  - Vehicular Traffic
  - Other Modes (Bike/Ped/Transit)
  - Railroad
  - Livability
  - Economic Development
  - Environmental Quality
  - Plan Consistency
- Cost

Project Status - Evaluation Criteria



- Weighting from Workshop #1

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Project Status - Evaluation Criteria

Vehicular Traffic

T1. Reduces traffic congestion
T2. Decreases traffic volumes on University Avenue & 4th Street
T3. Improves study area connectivity
T4. Decreases interaction and conflicts between future traffic and other modes
T5. Vehicular access to existing property and uses

Other Modes (Bike/Ped/Transit)

OM1. Facilitates bike and pedestrian travel
OM2. Facilitates transit use
OM3. Multi-modal environment and experience

Railroad

RR1. Changes to existing rail operations

Environmental Quality

EN1. Environmental quality (air)
EN2. Environmental quality (noise)
EN3. Environnemental quality (contaminated sites)
EN4. Storm water and water quality

Livability

L1. Creation of destinations, open space/public space, and points of interest
L2. Connection to the Mississippi River
L3. Cohesiveness of the community
L4. Improvements to visual quality
L5. Biodiversity
L6. Future traffic volumes remain in acceptable thresholds for street type
L7. Impacts of future traffic on adjacent properties and neighborhoods
L8. Impacts on historic character/features

Economic Development

ED1. Access (all modes) to parcels identified for future development or redevelopment
ED2. Impacts on access (all modes) to existing underutilized property not currently identified for redevelopment.

Plan Consistency

P1. Supports City of Minneapolis policies and Comprehensive Plan
P2. Supports University of Minnesota policies and Master Plan
P3. Supports policies and goals of adopted neighborhood plans and other agency plans

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Evaluation Process

Evaluation Process

- Establish units of measurement
- Measure alternatives against criteria
- Assign scores (1-5 points)
- Weight categories

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Evaluation Process

			Limited Build		SEMI Access		SEMI Access Plus		Full Build		SEMI Access with Extended Greenway		SEMI Access Plus with Greenway	
Criterion	Measure (what)	Method (how)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)
Traffic Volume														
T1. Reduces traffic congestion	Vehicle Hours of Delay (VHD) in study area	Vehicle Hours of Delay (VHD) in study area, measured at 9 key intersections.	AM = 107 zone/560 network PM = 233 zone/ 1020 network AM = 5 int. LOS E/F PM = 4 int. LOS E/F AM = 2.5 min delay/vehicle PM = 3.7 min delay (network average)	1	AM = 121 zone/596 network PM = 193 zone/930 network AM = +14 zone /+36 network PM = -40 zone/ -90 network AM = 4 int. LOS E/F PM = 1 int. LOS E/F AM = 2.6 min delay/vehicle PM = 3.4 min delay (network average)	0.4 pt delay; 1 pt intersection LOS 2.4	AM = 103 zone/567 network PM = 202 zone/806 network AM = -4 zone /+7 network PM = -31 zone/ -214 network AM = 4 int. LOS E/F PM = 2 int. LOS E/F AM = 2.5 min delay/ve PM = 2.9	2 pt delay; 0.25 intersection LOS	AM = 101 zone/439 network PM = 204 zone/872 network AM = -6 zone /-121 network PM = -29 zone/ -148 network AM = 4 int. LOS E/F PM =	2.4 pt delay; 1 pt intersection LOS	AM = 121 zone/596 network PM = 193 zone/930 network A	0.8 pt delay; 1 pt intersection LOS	AM = 103 zone/567 network PM = 246 zone/767 network 7 network 253 network /F F /vehicle network	2 pt delay; 0.25 intersection LOS 3.3
T2. Decreases traffic volumes on University Avenue & 4th Street	Daily traffic volumes (AADT)	Daily traffic volumes (AADT) in study area, measured for 3 key segments.	AADTs 1) Univ= 22,500; 4th = 23,000 2) Univ = 21,500; 4th = 19,000		1) Univ = -500 4th = 0					4.3	3) Univ = -3,000 4) Univ = -3,500	2.5	Univ = -500; 4th = +500 2) Univ = -1,000; 4th= 0 3) Univ = -3,500 4) Univ = -3,700	2.6
T3. Improves stu connectivity	Travel time within study area	Travel time on key Origin-Destination pairs within the study area.	NB = 1.5 min; SB = 3.2 min; PM: NB = 2.5 min; SB = 3.2 min 3) AM: EB = 6.4 min; WB = 6.8 min; PM: EB = 8.1 min; WB = 11.6 min	2	2) AM: NB = 1.4min (-6%); SB = 3.4min (+5%); PM: NB = 2.4min (-4%); SB = 3.0min (-7%) 3) AM: EB = 6.6min (+4%); WB = 6.8min (0%); PM: EB = 7.2min (-11%); WB = 8.6min (-26%)	3.5	%); PM: EB = 3.0min (0%); WB = 2.1min (-1%) 2) AM: NB = 1.5min (0%); SB = 3.1min (-4%); PM: NB = 2.5min (+1%); SB = 3.1min (-5%) 3) University AM: EB = 6.2min (-3%); WB = 6.5min (-3%); PM: EB = 7.7min (-5%); EB = 8.4min (-27%) 3) Granary AM: EB = 6.4min (+1%); WB = 5.8min (-15%); PM: EB = 7.2min (-12%); WB = 7.1min (-39%)	3.2	1) University AM: EB = 2.9min (+18%); WB = 2.8min (+6%); PM: EB = 3.4min (+15%); WB = 2.3min (+9%) 1) Granary AM: EB = 1.5min (-39%); WB = 1.4min (-47%); PM: EB = 1.4min (-52%); WB = 1.4min (-32%) 2) AM: NB = 1.5min (0%); SB = 2.6min (-18%); PM: NB = 2.7min (+7%); SB = 3.0min (-7%) 3) University AM: EB = 6.2min (-3%); WB = 6.4min (-6%); PM: EB = 7.6min (-6%); WB = 8.4min (-27%) 3) Granary AM: EB = 6.5min (+3%); WB = 6.6min (-2%); PM: EB = 7.2min (-11%); WB = 10.0min (-14%)	4.9	1) AM: EB = 2.8min (+11%); WB = 2.5min (-6%); PM: EB = 2.6min (-11%); WB = 3.2min (+52%) 2) AM: NB = 1.4min (-6%); SB = 3.4min (+5%); PM: NB = 2.4min (-4%); SB = 3.0min (-7%) 3) AM: EB = 6.6min (+4%); WB = 6.8min (0%); PM: EB = 7.2min (-11%); WB = 8.6min (-26%)	3.5	1) AM: EB = 2.5min (0%); WB = 2.6min (+1%); PM: EB = 5.7min (+93%); WB = 2.1min (+2%) 2) AM: NB = 1.5min (0%); SB = 3.1min (-4%); PM: NB = 2.8min (+14%); SB = 3.5min (+8%) 3) University AM: EB = 6.2min (-3%); WB = 6.5min (-3%); PM: EB = 9.5min (+17%); EB = 8.5min (-27%) 3) Granary AM: EB = 6.4min (+1%); WB = 5.8min (-15%); PM: EB = 7.3min (-10%); WB = 7.3min (-37%)	3.2
T4. Decreases interaction and conflicts between future traffic and other modes	Change in traffic volume at select intersections	Percent increase in traffic at intersections with designated bike lane/route or existing crash history of >1 pedestrian or bike crash per year during 2007-2009.	N/A - Used limited build alternative as basis for comparison	3	2 intersection volumes decrease, 2 increase, 3 no change Avg change: -0.06% New ped/bike conflicts = 27th/Granary	2.9	3 intersection volumes decrease, 4 increase, Avg change: -0.25% New ped/bike conflicts = 27th/Granary; 17th/Granary/U of M bike trail	2.8	7 intersection volumes decrease, Avg change: -5.8% New ped/bike conflicts = 27th/Granary; 17th/Granary/U of M bike trail; Granary/14th and Granary/15th to access vertical connections	3.2	2 intersection volumes decrease, 2 increase, 3 no change Avg change: -0.06% New ped/bike conflicts = 27th/Granary	2.9	3 intersection volumes decrease, 4 increase, Avg change: -0.25% New ped/bike conflicts = 27th/Granary; 17th/Granary/U of M bike trail;	2.8
		Identify access changes (eliminated, increased) for												

Huge spreadsheet!!

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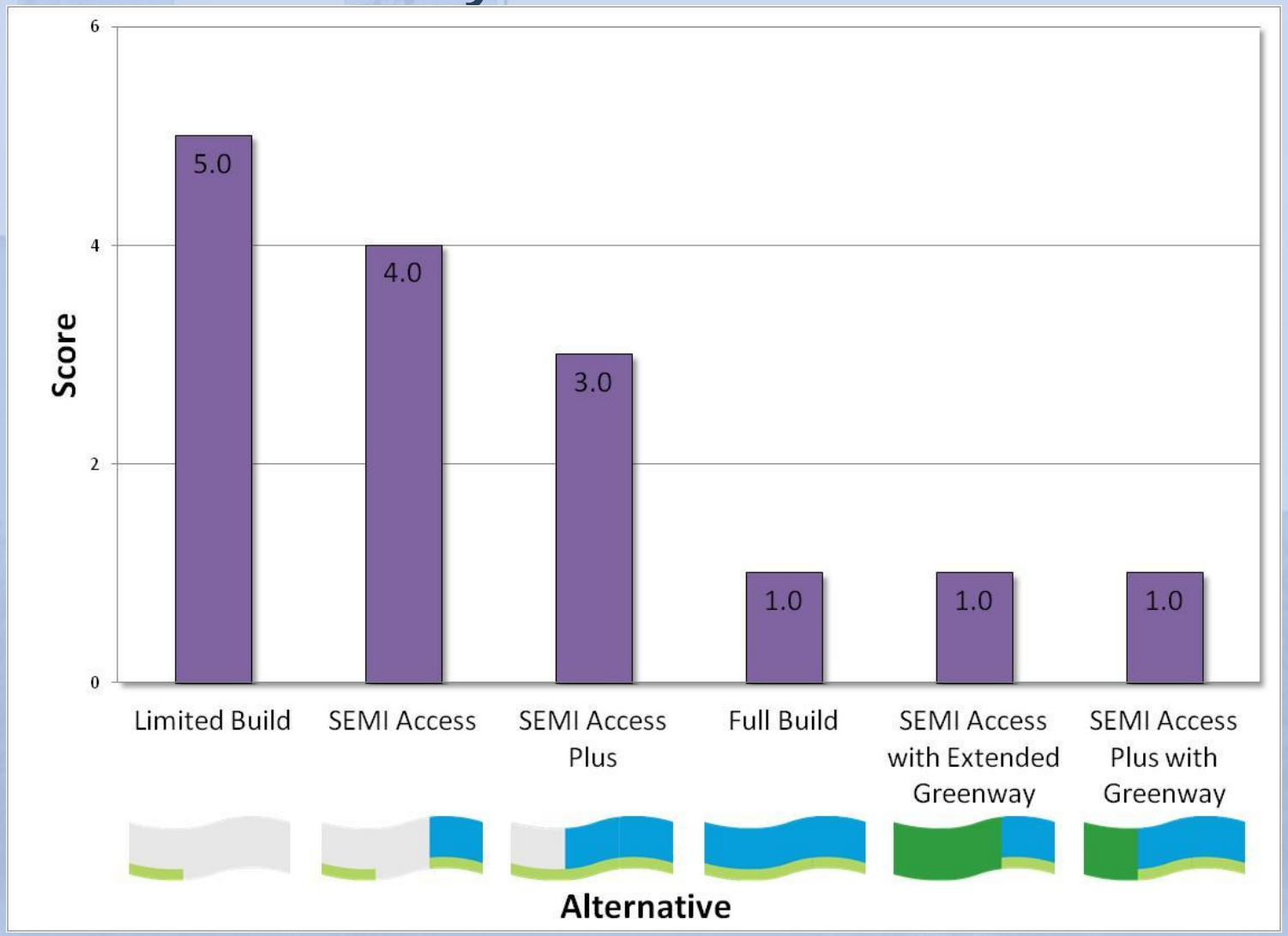
Preliminary Results - Railroad



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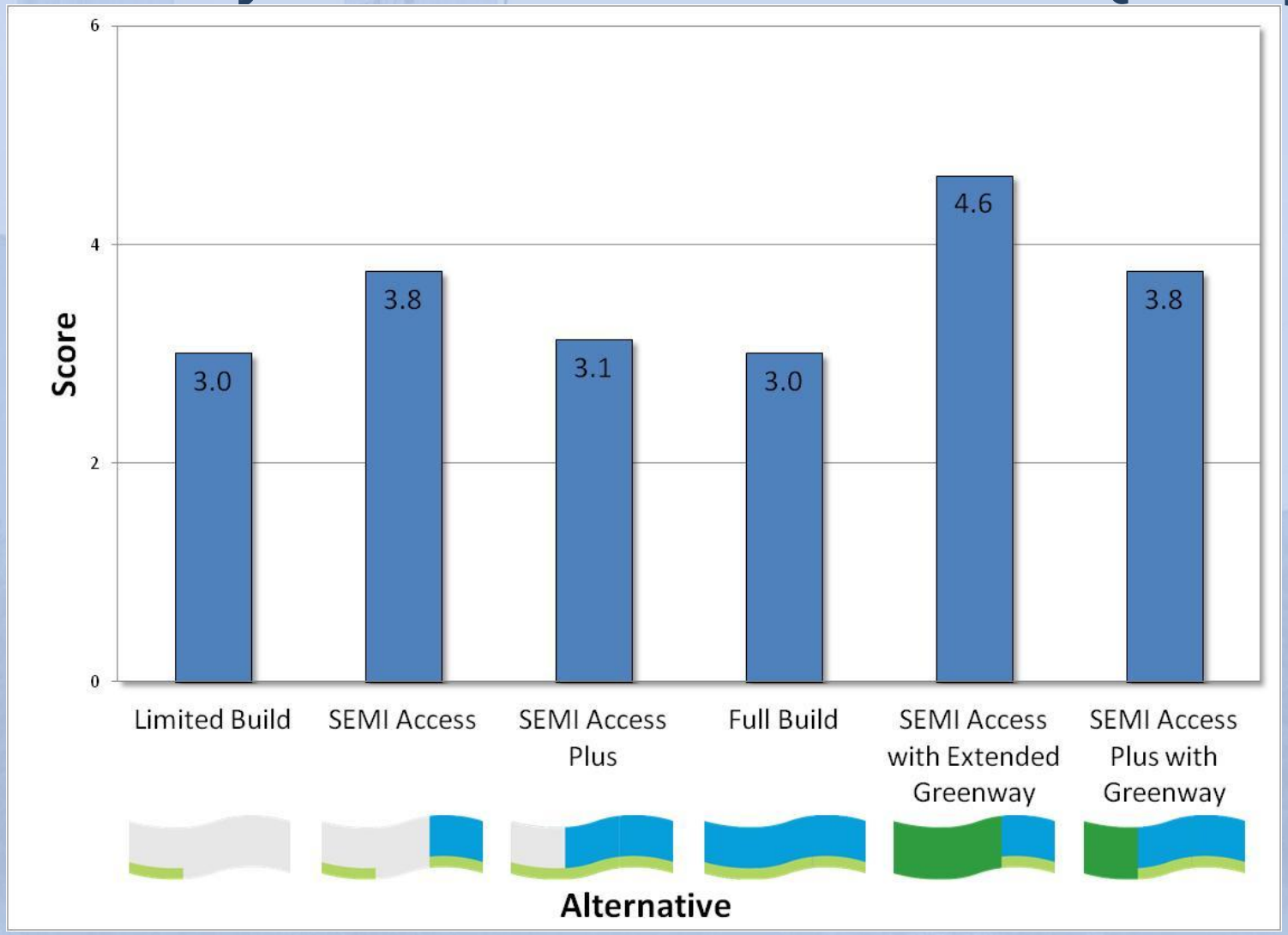
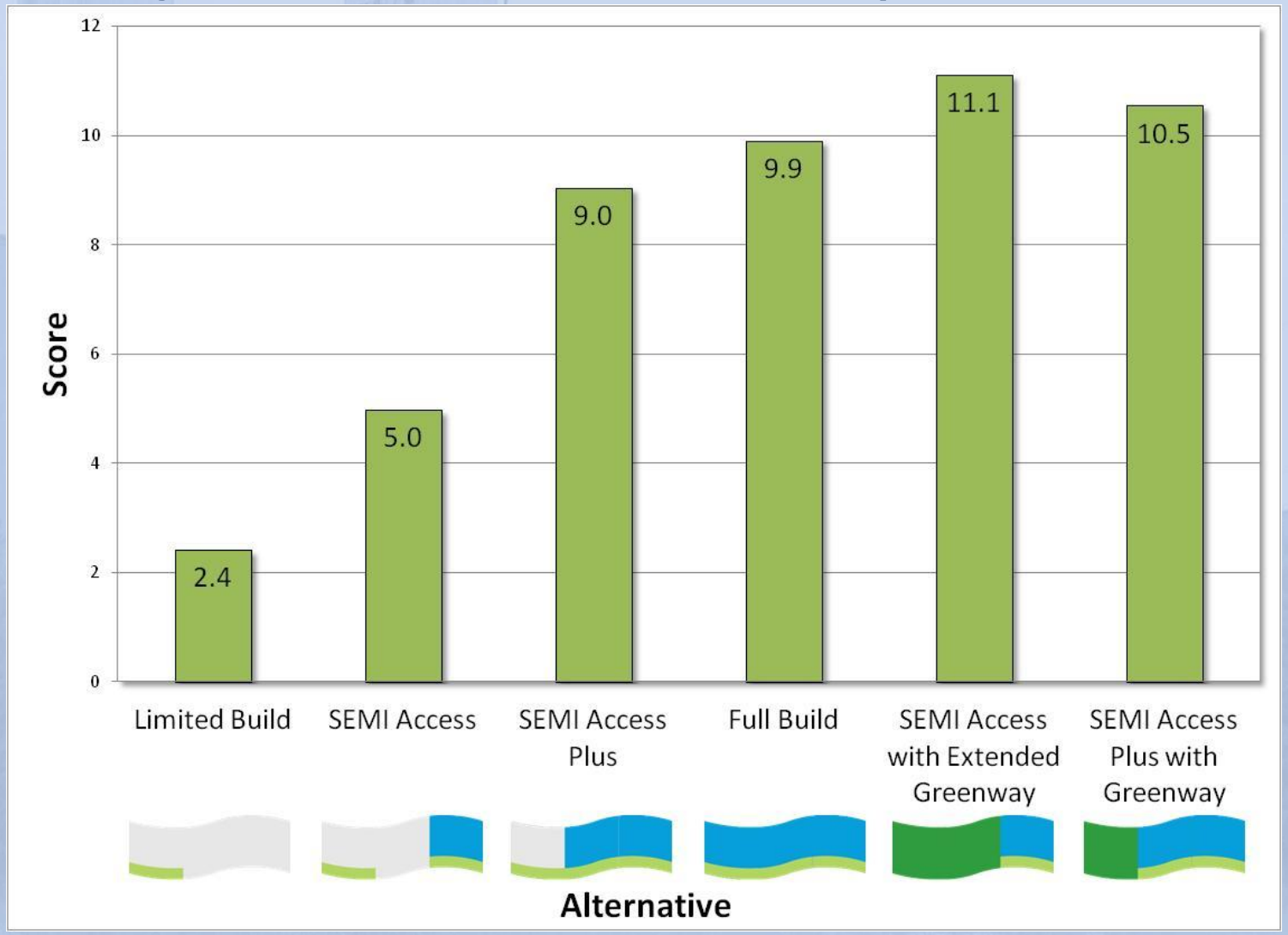
Preliminary Results – Environmental Quality



Preliminary Results – Other Modes (Ped/Bike/Transit)



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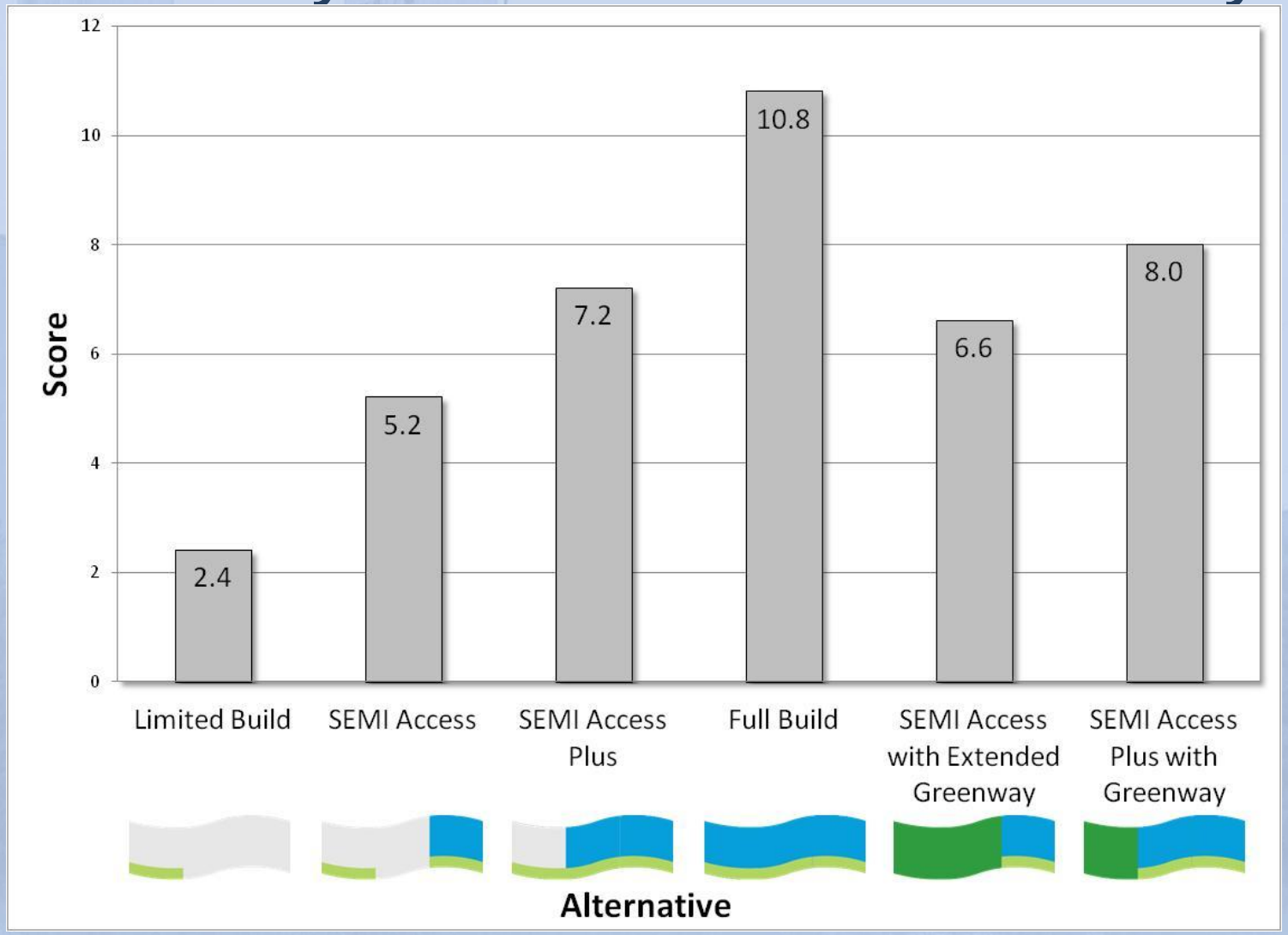
Preliminary Results – Plan Consistency



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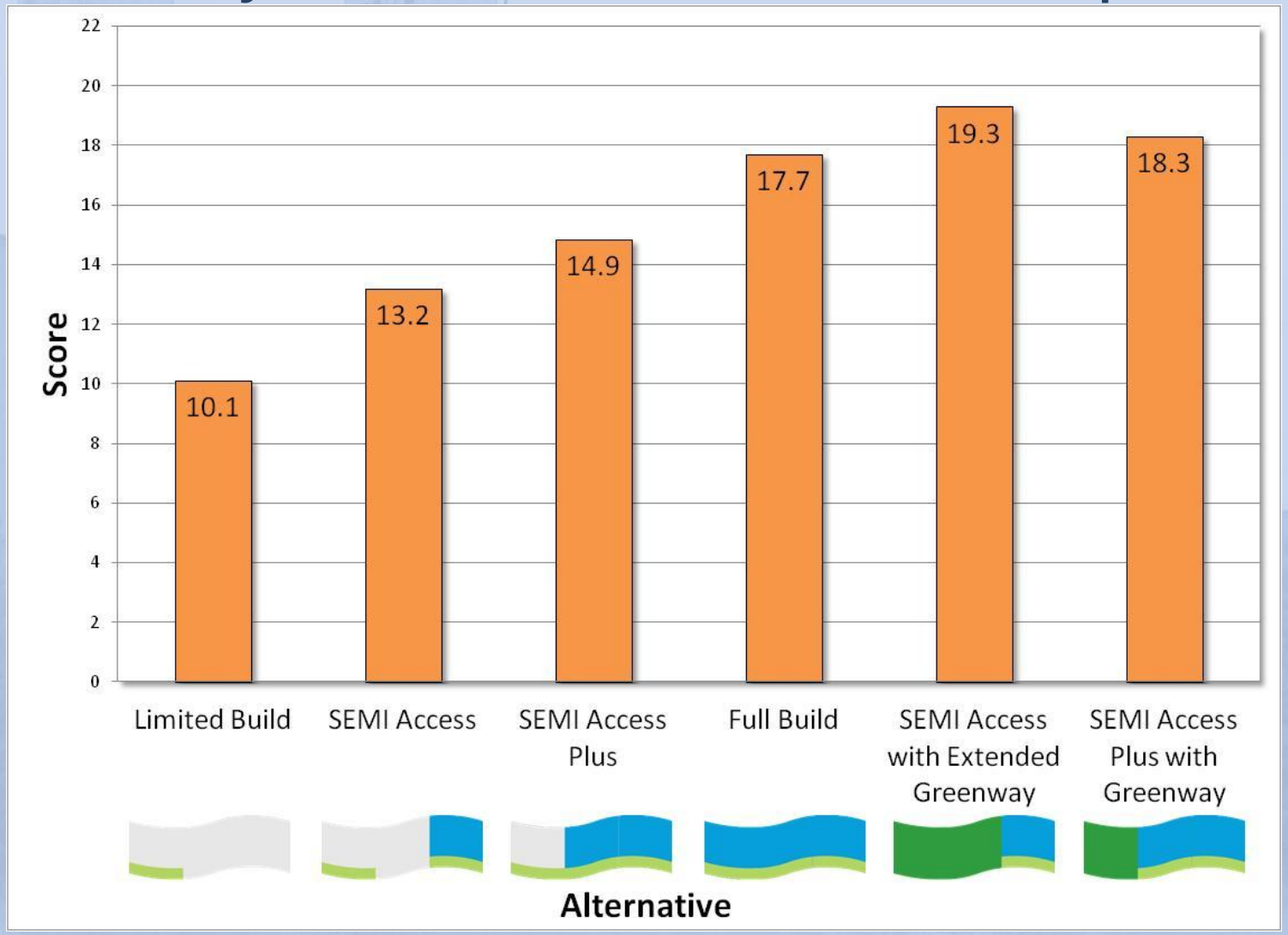
Preliminary Results – Economic Development



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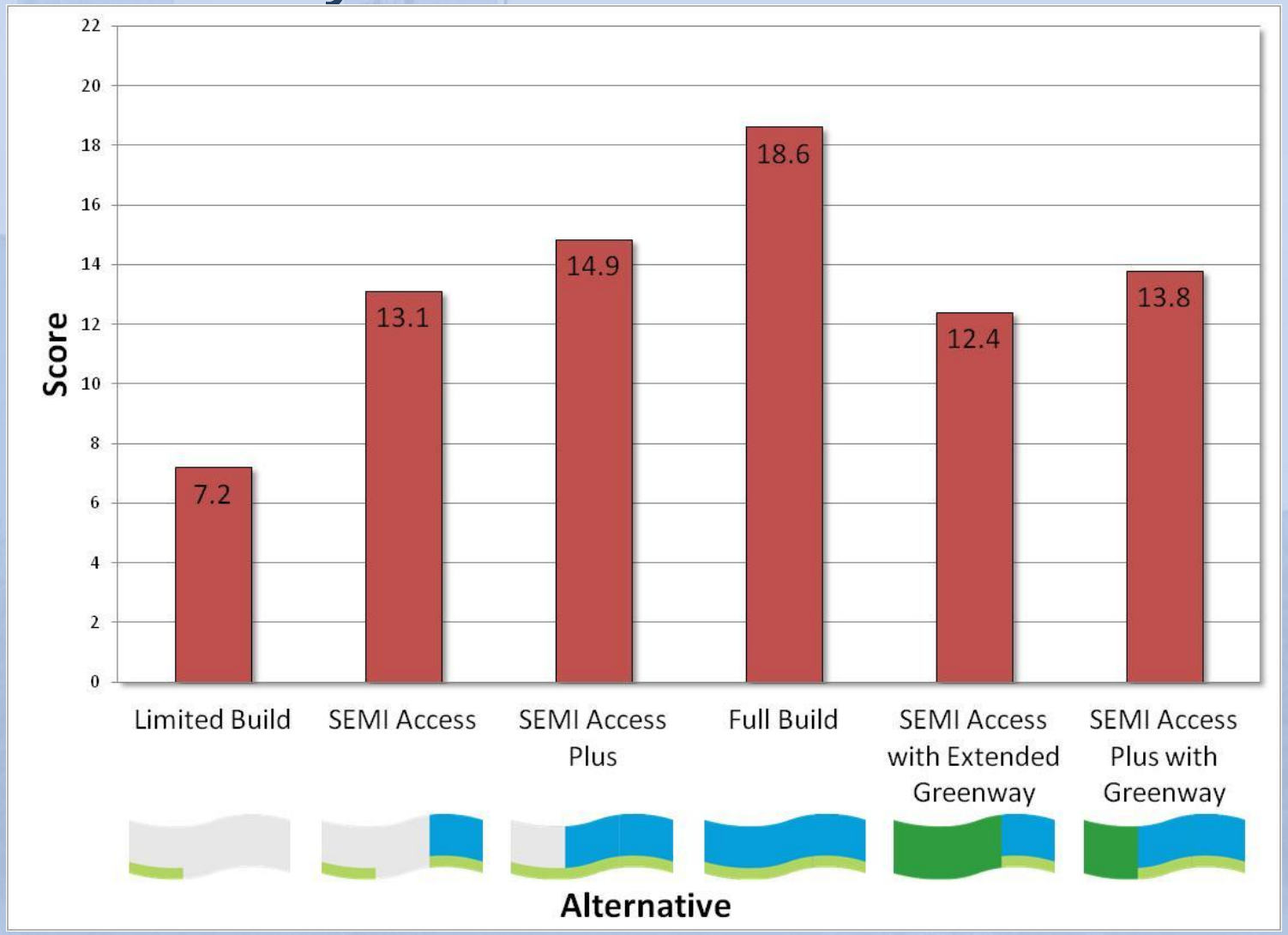
Preliminary Results – Vehicular Traffic



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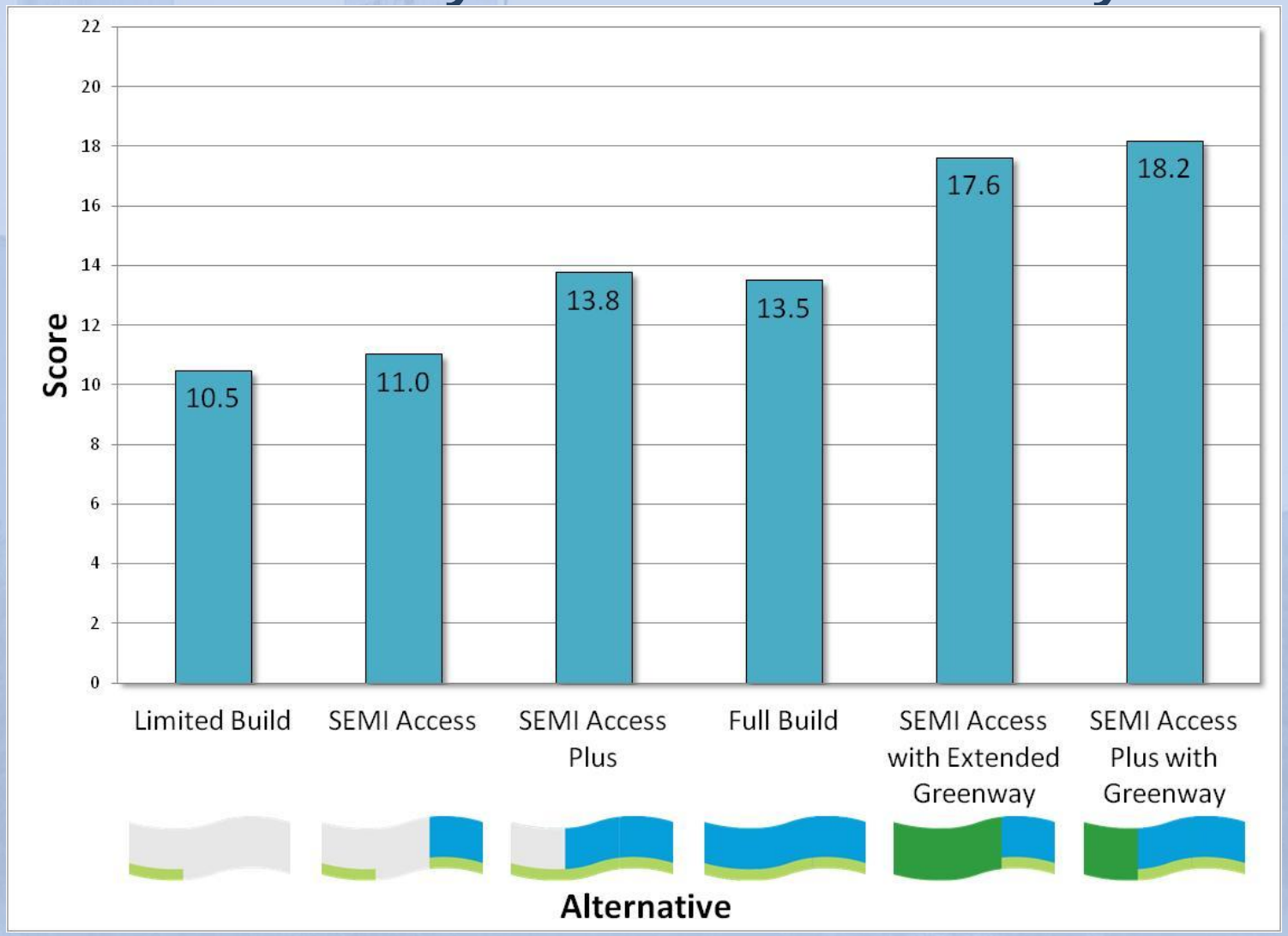
Preliminary Results – Livability



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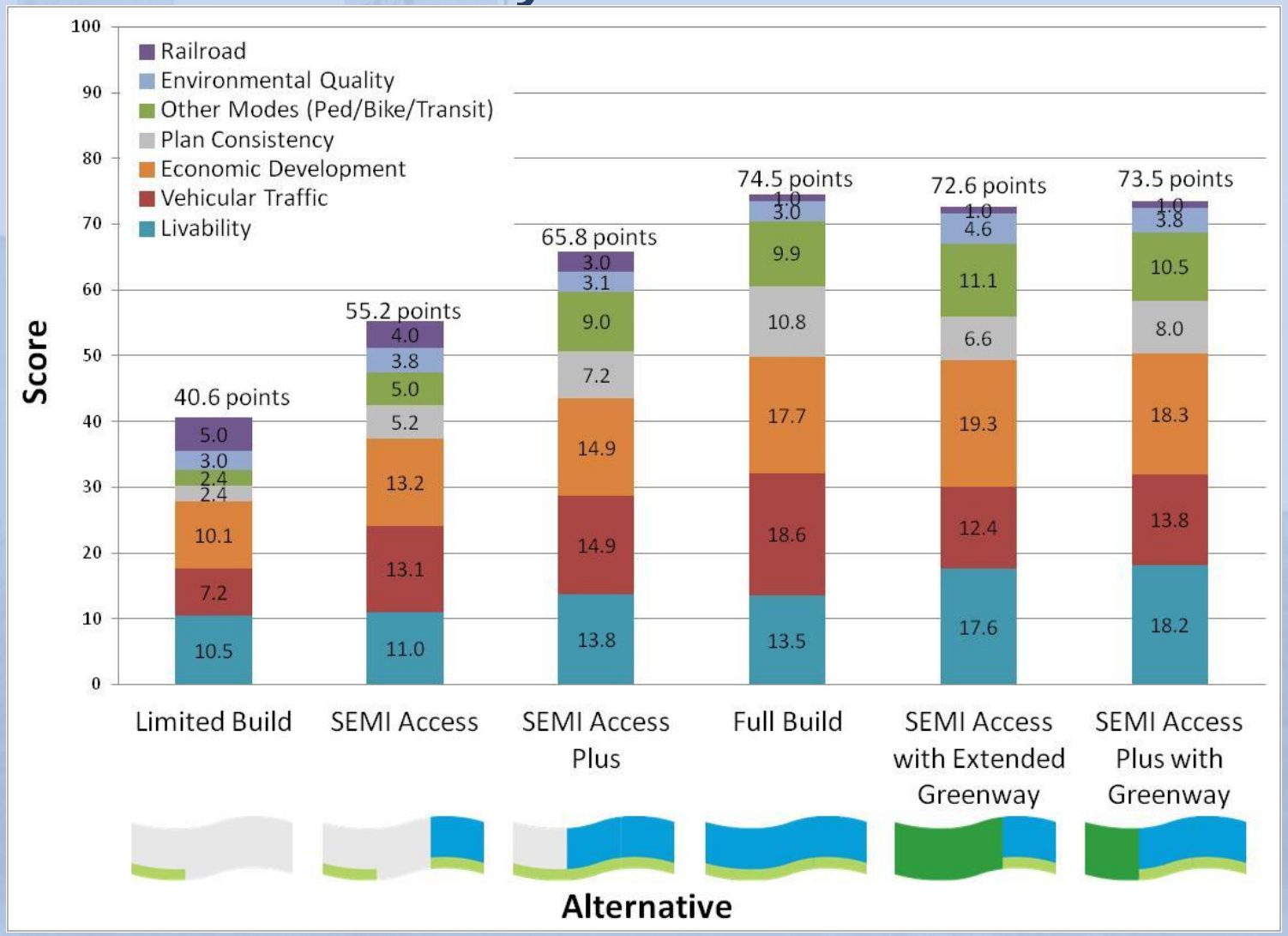
Preliminary Results – Total



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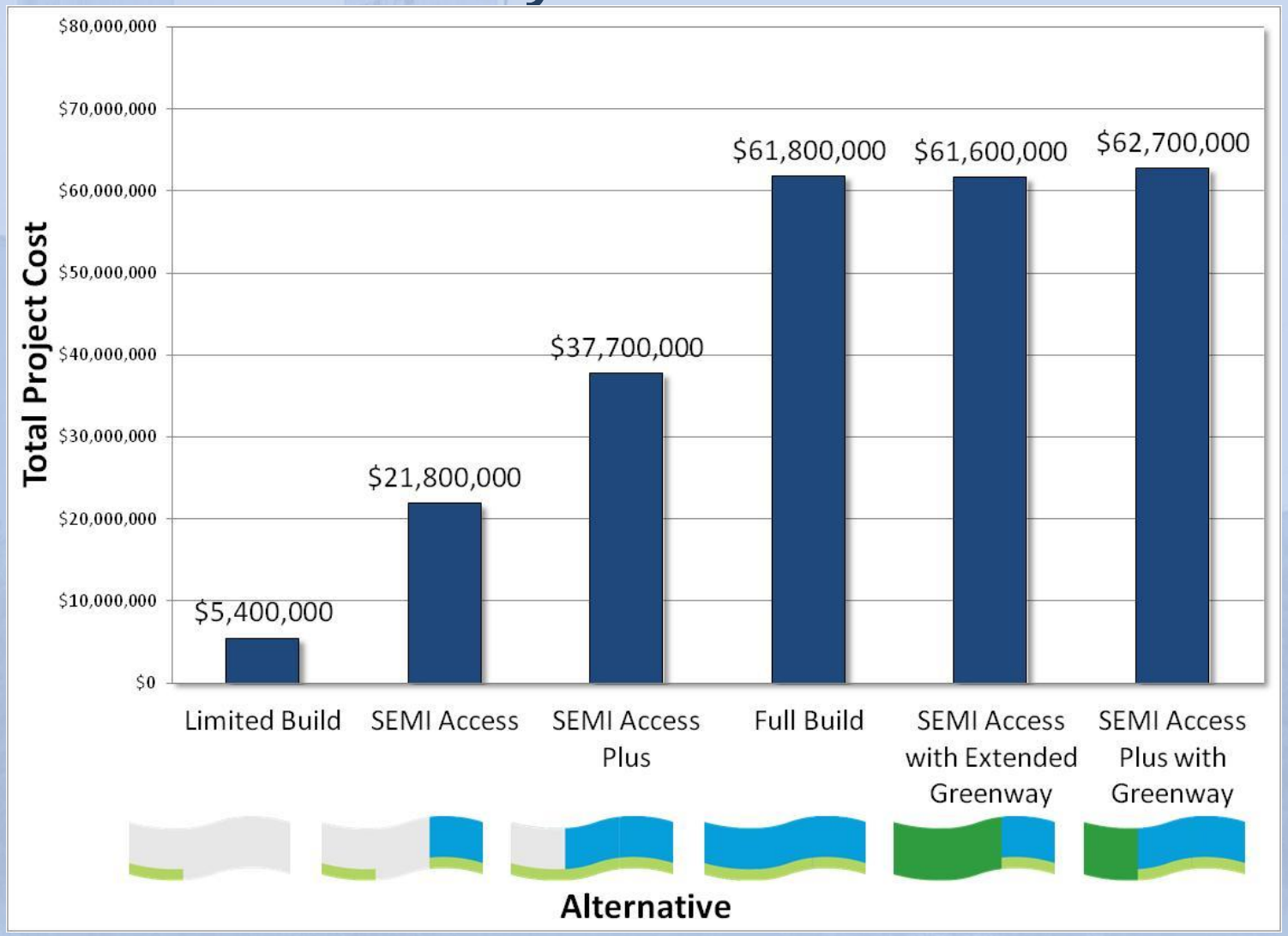
Preliminary Results – Cost



Preliminary Results

- More investment = more benefit
  - All full length alternatives (Full Build and Greenway alternatives) have highest total scores and costs
- Cost/Benefit Ratio– Diminishing Returns
  - Full Build scores 1.4x better for Vehicular Traffic compared with SEMI Access, but at 2.6x the cost
  - SEMI Access Plus with Greenway scores 1.7x better for Livability compared with SEMI Access, but at 2.8x the cost

Small Groups

- Recap/Questions
- Discussion
- Feedback on Evaluation
  - Do the results make sense?
  - What would you score or weight differently?
  - Identify top 4 issues/comments
- Group Reporting

Next Steps

- Finalize Evaluation Results
- Draft Recommendations
- Workshop – January 2012
- Final Report